

METHODS OF PLANARIZING STRUCTURES ON WAFERS
AND SUBSTRATES BY POLISHING

ABSTRACT OF THE DISCLOSURE

5 Methods of planarizing structures formed on the surfaces of substrates
and wafers are disclosed. The methods form a planarizing layer over the surface and
the structures, or the locations where the structures are to be formed, such that the top
surface of the layer has low areas between the locations of the structures, and such that
the low areas lie substantially within a plane which is below the tops of the structures.

10 A polish-stop layer is then formed over the low areas of the planarizing layer, the
polish-stop layer being more resistant to polishing than the planarizing layer and,
preferably, the structures. The resulting surface is then polished. The polishing may
be accomplished by, for example, standard mechanical polishing, and chemical-
mechanical polishing.

15